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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/652,834	08/31/2000	Michael S. Bertone	1662-27800 (P00-3105)	4372

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EXAMINER	
LEZAK, ARRIENNE M	
ART UNIT	**PAPER NUMBER**
2143	5

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/652,834	BERTONE ET AL.	
	Examiner	Art Unit	
	Arrienne M. Lezak	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-10 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-10 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 31 August 2000 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent US 6,496,917 B1 to Cherabuddi.

3. Regarding Claims 1, 5 and 10, Cherabuddi discloses a distributed multiprocessing computer system, comprising: a plurality of processor nodes each coupled to an associated memory module, wherein each memory module may store data that is shared between said processor nodes; a Home processor node that includes a data block and a coherence directory for said data block in an associated memory module; on Owner processor node that includes a copy of said data block in a memory module associated with the Owner processor node, said copy of said data block residing exclusively in said memory module; a Requestor processor node that encounters a read or write miss of said data block and requests said data block from the Home processor node; and wherein said Home processor node receives the request for the data block from the Requestor processor node, forwards the request to the Owner processor node for the data block and performs a speculative write of the next directory state to the coherence directory for the data block without waiting for the Owner

processor node to respond to the request (Abstract; Col. 2, lines 66-67; and Col. 3, lines 1-10).

4. Regarding Claims 2 & 6, Cherabuddi discloses a distributed computer system wherein the speculative write of the next directory state occurs only if the next directory state cannot be determined and the Home processor node and Owner processor node are two different processor chips in the computer system, (Col. 3, lines 1-34).

5. Regarding Claims 3 & 7, Cherabuddi discloses a distributed multiprocessing computer system wherein the memory module containing the coherence directory for the data block is in a low latency state that reduces memory read and write access times while the Home processor node is performing the speculative write of the next directory state to the coherence directory for the data block, (Col. 3, lines 29-35 and Col. 4, lines 25-61).

6. Regarding Claims 4 & 8, Cherabuddi discloses a distributed multiprocessing computer system wherein the next directory state for the data block is corrected if the response by the Owner processor node to the Home processor node request for the data block indicates a different next directory state from the next directory state speculatively written by the Home processor node to the coherence directory for the data block, (Col. 3, lines 1-35 and Col. 4, lines 25-61).

7. Regarding Claim 9, Cherabuddi discloses a distributed multiprocessing computer system wherein the speculative write of the next directory state releases hardware contained in the first processor node, allowing said first processor node to accept

requests for data blocks and coherency directories for said data blocks stored in the memory module for the first processor node, (Col. 4, lines 62-67 and Col. 5, lines 1-6).

8. Therefore, this reference may reasonably be read to teach or describe every element or claim limitation of Claims 1-10.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US PATENT US 2001/0029574 A1 to Razdan;

US PATENT US 6,591,307 B1 to Arimilli;

US PATENT US 6,457,101 B1 to Bauman;

US PATENT 5,950,228 to Scales; and

US PATENT 6,226,721 B1 to Strongin.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arrienne M. Lezak whose telephone number is (703)-305-0717. The examiner can normally be reached on M-F 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (703)-308-5221. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-305-6121.

Arrienne M. Lezak
Examiner
Art Unit 2143

AML

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100